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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,516	05/10/2001	Brian Byrnes	51140-00001USPT	6340

7590 04/16/2004

PATENT DEPARTMENT  
ATTEN: BARRY YOUNG  
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1755 EMBARCADERO ROAD  
PALO ALTO, CA 94303

EXAMINER
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COURTENAY III, ST JOHN

ART UNIT	PAPER NUMBER
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2126

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DATE MAILED: 04/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/852,516

Applicant(s)

BYRNES, BRIAN

Examiner

St. John Courtenay III

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 is/are allowed.
- 6) ☒ Claim(s) 14-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

ST. JOHN COURTENAY III  
PRIMARY EX

## Response to Amendment

### New Grounds of Rejection

Applicant's remarks have been considered, but are deemed to be moot in view of the new grounds of rejection necessitated by Applicant's amendments to the claims. New grounds of rejection under 35 U.S.C. §103 are set forth below:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **McNamara et al.** (U.S. Patent 6,262,976) in view of **Arkko** (U.S. Patent 6,584,500).

### As per independent claim 14:

**McNamara** discloses the invention substantially as claimed:

**McNamara** teaches a method for managing the cost of utilization of computer resources, the method comprising the steps of:

- defining classes of computer resources [e.g., see the four classes shown in fig. 4, and discussed beginning col. 11, line 30; see column 22 discussion of classes, beginning line 41, cont'd col. 23 and particularly col. 24, lines 58-61: "If there were multiple paths through different edge routers to the remote domain, selection of paths could be based on Quality of Service, QoS, criteria or available bandwidth." also

see: col. 19, lines 64-66: "Alternatively, the path switch matrix could be loaded with optional paths in addition to the base class paths. The optional paths would allow selection based on different quality of service (QoS) types.";

- defining computer resource usage policies based on the class definitions [e.g., see the four classes shown in fig. 4, and discussed beginning col. 11, line 30; see column 22 discussion of classes, beginning line 41],
- whereby the cost utilization of the computer resources is managed by using the computer resource according to the usage policies [e.g., see col. 24, line 57: "Each path that detects a unique connection to the destination domain could be used for data traffic as well. If there were multiple paths through different edge routers to the remote domain, selection of paths could be based on Quality of Service, QoS, criteria or available bandwidth." and associated discussion col. 24].

However, **McNamara** does not *explicitly* teach the following additional limitations (added by Applicant's amendment to the claims):

**Arkko** teaches defining *classes of persistent resources, the classes having assigned costs and controlling usage of the persistent computer resources by particular individuals*, as claimed [e.g, see "assigning a cost class to at least one link or node of the data network" col. 2, line 13, and "multiple intermediate cost classes may be defined" col. 2, line 30, and "Billing based upon real communication costs to the Service Provider and the user can be performed" col. 2, line 45; see High and Low costs table shown in col. 5, see billing system detailed discussion beginning, col. 5, line 35].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **McNamara** by implementing the improvements detailed above because it would provide **McNamara's** system with the enhanced capability of billing individual users based upon real communication costs to the Service Provider [e.g., see **Arkko** col. 2, line 45].

**As per dependent claim 15:**

**McNamara** teaches the quality of service attributes are selected from a group including resource performance, resource reliability, resource availability, resource latency, and resource bandwidth [e.g., see col. 19, lines 64-66: "Alternatively, the path switch matrix could be loaded with optional paths in addition to the base class paths. The optional paths would allow selection based on different quality of service (QoS) types."].

**As per dependent claim 16:**

**McNamara** teaches assigning each class an identification designator [e.g., see the four named classes shown in fig. 4, and discussed beginning col. 11, line 30; see column 22 discussion of classes, beginning line 41].

**As per dependent claims 17-19:**

**McNamara** teaches the step of assigning a broad range of usage quotas to the defined classes [e.g., see "Interior Domain Area scaling allows aggregation of smaller sized interior network elements to provide for efficient control and network resource usage." and associated discussion col. 49, lines 29-31]

Claims 20 - 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gai et al.** (U.S. Patent 6,651,101) in view of **Arkko** (U.S. Patent 6,584,500).

**As per independent claim 20:**

**Gai** discloses the invention substantially as claimed:

**Gai** teaches a method for managing computer resource usage comprising the steps of:

- defining classes [e.g., see "policy classes" and associated discussion col. 14, lines 32, 34];
- defining computer resource usage policies [e.g., see col. 14, line 5, "policy bindings" ];
- applying the usage policies to the classes [e.g., see "policy identifier element 554" and "A PID specifies a particular policy class" and associated discussion col. 14, line 32];
- generating reports on the usage of the classes [e.g., see print reports and associated discussion col. 10, lines 8-37];
- using the computer resource according to the defined class in accordance with the computer resource usage polices [e.g., see "policy enforcer 210" and associated discussion beginning, col. 18, line 37; see also policy enforcer discussion col. 4, beginning line 58].

However, **Gai** does not *explicitly* teach the following additional limitations (added by Applicant's amendment to the claims):

**Arkko** teaches defining *classes of persistent resources, the classes having assigned costs and controlling usage of the persistent computer resources by particular individuals*, as claimed [e.g, see "assigning a cost class to at least one link or node of the data network" col. 2, line 13, and "multiple intermediate cost classes may be defined" col. 2, line 30, and "Billing based upon real communication costs to the Service Provider and the user can be performed" col. 2, line 45; see High and Low costs table shown in col. 5, see billing system detailed discussion beginning, col. 5, line 35].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **Gai** by implementing the improvements detailed above because it would provide **Gai's** system with the enhanced capability of billing individual users based upon real communication costs to the Service Provider [e.g., see **Arkko** col. 2, line 45].

**As per dependent claims 21 &22:**

**Gai** teaches assigning a cost to a defined class [e.g., see col. 15 lines 58-67, cont'd col. 16, lines 1-8].

**As per dependent claim 23:**

**Gai** teaches the quality of service attributes are selected from a group including resource performance, resource reliability, resource availability, resource latency, and resource bandwidth [e.g., see col. 8, lines 12-14].

**As per dependent claims 24 -32:**

**Gai** teaches assigning a class identification to each class [e.g., see "policy classes" and associated discussion col. 14, lines 32,

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34; and resource usage quotas as claimed [e.g., see discussion col. 15, lines 58-67, cont'd col. 16, lines 1-8].

**Allowable Subject Matter:**

Claims 1-13 appear to be allowable over the prior art of record, subject to the results of a final search.

The words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d1320, 1322 (Fed. Cir. 1989).

With respect to independent claim 1, the claimed "system management service" (SMS), "configuration database" (CDB), and the "distributed metadata service (MDS), have been considered by the Examiner as a definitions where it was necessary to rely upon the relevant sections of the specification to determine the meaning and scope of the aforementioned claim elements.

The prior art of record does not teach nor fairly suggest the use of the combined System Management Service (SMS), the Configuration Database (CDB) for storing data resource usage quotas, and the Distributed Metadata Service (MDS), where the three aforementioned components are considered according to their supporting definitions in the specification and operatively coupled as claimed.



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**Prior Art not relied upon:**

Please refer to the references listed on the attached PTO-892 which are not relied upon in the claim rejections detailed above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See **MPEP § 706.07(a)**. Applicant is reminded of the extension of time policy as set forth in **37 CFR 1.136(a)**.

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to **37 CFR 1.136(a)** will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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### **How to Contact the Examiner:**

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to **St. John Courtenay III** whose voice telephone number is **(703) 308-5217**. A voice mail service is also available at this number. Normal Flex work schedule: M – F 7:30 AM - 4:00 PM

- **All responses sent by U.S. Mail should be mailed to:**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

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### **Patent Customers advised to FAX communications to the USPTO**

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/faxnotice.pdf>

**Effective Oct. 15, 2003, ALL patent application correspondence transmitted by FAX must be directed to the new PTO central FAX number:**

**NEW PTO CENTRAL FAX NUMBER:  
703-872-9306**

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- Any inquiry of a general nature or relating to the status of this application should be directed to the **TC 2100 Group receptionist: (703) 305-3900.**

**Please direct inquiries regarding fees, paper matching, and other issues not involving the Examiner to:**

**Technical Center 2100 CUSTOMER SERVICE: 703 306-5631**

The Manual of Patent Examining Procedure (MPEP) is available online at:  
<http://www.uspto.gov/web/offices/pac/mpep/index.html>

  
**ST. JOHN COURTENAY III  
PRIMARY EXAMINER**